THE DEVELOPMENT OF THE HONG KONG DEBT MARKET

- A POST-CRISIS ANALYSIS

by

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ABSTRACT

In the past 22 months, the Asian countries have witnessed their most severe economic contractions since the oil crisis. Starting from July 1997, the Asian Financial Crisis has shaken the financial markets and political stability in the region. The onslaught of unrestrained and volatile international capital was fully demonstrated in Asia. As markets ran into panic, currencies of baht, rupiah, won, ringgit, peso and others also underwent substantial devaluations. Credit crunch and outlook downgrading have swallowed every vigour of many once active financial markets.

However, the crisis at the same time unveils the inherent weakness of Asian economies. Despite the high growth rates, strong domestic savings and prudent fiscal policies, none of the Asian countries could avoid stumbling into a world-class liquidity crisis. The severe mismatch in funding and the failure of effective intermediation have doomed the economies since the early days. What Asia lacks is a long-term capital market that can transform her wealth into powerful liquidity to sustain economic growth. This is exactly a well-functioned debt market does.

Hong Kong, with an established legal framework, pools of professional practitioners, advanced market infrastructure and full financial liberalisation, should play a proactive role in the development of such a debt market. Her unique geographical position of both within the orbit of emerging market and at the vicinity to Mainland China offers the SAR unparalleled opportunity to develop as a regional debt centre as well as a premier financing centre for China.

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LIST OF ABBREVIATIONS

AA	Airport Authority
AFC	Asian Financial Crisis
CD	Certificate of Deposit
CMU	Central Moneymarkets Unit
CSD	Central Securities Depositories
EFB	Exchange Fund Bills
EFBN	Exchange Fund Bills and Notes
EFN	Exchange Fund Notes
HKMA	Hong Kong Monetary Authority
HKMC	Hong Kong Mortgage Corporation
IMF	International Monetary Fund
KCRC	Kowloon Canton Railway Corporation
MBS	Mortgage-backed securities
MOF	Ministry of Finance
MPF	Mandatory Provident Fund
MTRC	Mass Transit Railway Corporation
REPO	Repurchase Agreement
RTGS	Real Time Gross Settlement
SAR	Special Administrative Region
SEHK	Stock Exchange Hong Kong

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Professor McGuinness is also the supervisor of this MBA project. He has provided me valuable insight to stimulate my thinking in the topic. Without his patient guidance, this paper could not have been finished. His valuable comments on the draft of this paper helped improve the quality of the write-up a lot. His supervision and inspiration are deeply appreciated. Besides, I also wish to thank some of my close friends and the staff at Town Centre who helped searching information for me. Without their support and dedication, this paper could not have been published either.

CHAPTER 1

INTRODUCTION

The twelfth of September 1998 was a bad day for Hong Kong debt market players. On this Saturday the Hong Kong Monetary Authority (HKMA) issued letters to request the supranational borrowers, which are the major issuers in the territory, to desist from raising funds at short maturity. This special request, originally aimed to stop the speculators from getting into swaps with the supranational borrowers and hence shorting Hong Kong dollar, nevertheless closed down the short end of the local bond market virtually.

While this moral request was later lifted following the effective adoption of seven new measures by the HKMA in strengthening the currency board system, the authority has in fact done a lot in developing the debt market in Hong Kong. Though the colony, now the Special Administration Region (SAR), has been well recognised as a major international financial centre, its debt market was just an emerging one in the 1980s. It was not until the introduction of the Exchange Fund Bills programme in 1990 that the development of local debt market was ignited. Mr. Joseph Yam, Chief Executive of the HKMA, used the acronym "B.I.R.D.S., which stands for Benchmark, Infrastructure, Rating, Demand and Supply[1]" to analyse the development of debt market in Hong Kong.

The HKMA has made significant efforts in building up a **benchmark yield curve**, which is advantageous to the pricing of issues in both primary and secondary markets. Through the public tendering of various maturity of Exchange Fund Bills and Notes in the market, the HKMA has successfully established the Hong Kong dollar benchmark yield curve from 28 days to 10 years. By now, Exchange Fund Bills and Notes (EFBN) have become the most liquid public debt and provide the most reliable benchmark yield curve in the region. As at 31 January 1999, the total amount of Exchange Fund Bills and Notes outstanding was HKD97.5 billion with an average daily trading turnover of HKD13.4 billion[2]. On the other hand, the HKMA has also offered various tax incentives to the issuance of high quality private debt paper in Hong Kong. Table 1 shows the growth pattern of both public and private debt in Hong Kong from 1991 to 1998.

TABLE 1 OUTSTANDING HONG KONG DOLLAR DEBT INSTRUMENTS

HKD billion (31 December)	*1991*	*1995*	*1996*	*1997*	*1998*
Exchange Fund bills & notes	**14.6**	**58.73**	**91.85**	**101.65**	**97.45**
Exchange Fund Bills	*14.6*	*44.33*	*70.25*	*72.85*	*63.85*
Exchange Fund Notes	*0*	*14.4*	*21.60*	*28.80*	*33.60*
Private sector debt instruments[3]	**23.2**	**138.32**	**189.56**	**243.86**	**292.66**
Floating rate	*N.A.*	*86.26*	*127.97*	*167.97*	*159.53*
Fixed rate	*N.A.*	*52.06*	*61.59*	*75.89*	*133.13*
TOTAL	**37.8**	**197.05**	**281.41**	**345.51**	**390.11**

Source of data: HKMA statistics

[1] Yam, Joseph. "Development of the debt market." Speech: Asian Debt Conference on 14 July 1997.
[2] Source: HKMA statistics found at website http://www.info.gov.hk/hkma/stat
[3] While the EFBN are all settled through the CMU of HKMA, not all the private sector issues employ this settlement system. For example, among the HKD292.66 billion of private debt issues in 1998, around 76% or HKD223.64 billion of which are settled through CMU. Source: HKMA statistics found at website in footnote 2.

The development of debt market in Hong Kong is also enhanced by the **infrastructure and technological platform** built up by the HKMA. In April 1983, an efficient clearing and settlement system was set up using the Central Moneymarkets Unit (CMU) system. A detailed description of the CMU system will be given under section of 'Clearing and Settlement' in Chapter III. Coupled with a seamless interface with the Real Time Gross Settlement (RTGS) payment system implemented in December 1996, the infrastructure provides both real time and end of day delivery versus payment service for both HKD and foreign currency-denominated debt securities. In addition, to facilitate cross border trades in securities, the CMU has also been linked with the Central Securities Depositories (CSDs) in Australia and New Zealand. A similar linkage is now underway to hook up with the Government's Securities Book-Entry System in Mainland China. These linkages will facilitate trading and holding of Asian bonds by Hong Kong and overseas investors, thereby enlarging the investor base of HK debt instruments.

Credit rating provides crucial information on the risk and thus pricing of an issue. Four renowned international rating agencies including Moody's and Standard & Poor's have already set up offices in Hong Kong. Though their ratings are no longer applicable in assessing the eligibility of various CMU instruments for REPO purpose, they are still applied in the identification of liquefiable assets to satisfy the statutory liquidity ratio required by the Banking Ordinance and the classification of debt instruments for tax concession.

In addition, to enhance the liquidity of debt instruments, the Stock Exchange of Hong Kong (SEHK) is planning to provide a platform for Exchange Fund and quasi-government bodies such as the Hong Kong Mortgage Corporation (HKMC), Airport Authority (AA) and the Mass Transit Railway Corporation (MTRC) to list their debt securities on the Exchange. A consultation paper was already issued by the Stock Exchange of Hong Kong (SEHK) in January 1999 to invite comments on the issue. The prospective listing has a dominant supporting effect on the **market demand** of debt instruments. While the accessibility of debt instruments to retail investors will be greatly enhanced, we can foresee a flow of domestic savings from the equity stocks or bank deposits to those high quality debt instruments. Besides, the Mandatory Provident Fund (MPF) scheme to be launched in December 2000 is also a significant source of demand for high quality debt securities. It is estimated that the asset size of MPF will reach USD1.5 billion in its first year of operation, and the fund size will rise to US$9 billion by the end of the fifth year[4].

On the **supply side**, corporations are more readily tapping funds through debt and note issuance. The HKD1.5 billion issue of Federal National Mortgage Corporation[5] in July 1997 marked a major breakthrough for the Hong Kong Dollar market. Moreover, the Hong Kong Mortgage Corporation established in March 1997 will bring liquidity and standardisation to mortgage securitisation in Hong Kong. Capitalised at HKD2 billion from the Exchange Fund, the Corporation is expected to raise a total of HKD40 billion in its note and debt issuance programme[6].

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[4] Tsang, Donald. "Asian Bond Market." Speech on Asian Debt Conference 6 July 1998.

[5] Federal National Mortgage Corporation is the largest U.S. corporation in term of total assets and is the second largest debt issuer next to the U.S. Treasuries. Source: Anonymous. "Fannie Mae HKD1.5 billion global prompts interest in dollar bloc" Euroweek. (London) 11 July 1997.

[6] Lamoreaux, Pamela. "A busy year for Hong Kong Mortgage Corporation." Housing Finance International. (Chicago) September 1998.

The Corporation will become one of the most active and regular issuers of high quality debt securities in the territory.

While Mr. Yam's "B.I.R.D.S." analysis outlines a bright prospect for the Hong Kong debt market, the writer wishes to emphasise that the lack of liquidity, incentive and co-ordinated regional forces are the major hindrances to the emergence of an Asian debt centre. However, albeit the negative impact on economic recession and political instability in some countries, the Asian Financial Crisis has brought critical influence and can be the right catalyst to kick-start the development of a regional debt centre.

The Asian Financial Crisis (AFC) has shaken the financial markets and political stability in the region. While investment banks are required to make huge provisions in Indonesia and Thailand, financing activities of corporations all over the region have come to a standstill. The turmoil has swallowed the energy of many once active financial markets. On the other hand, in defending the peg with USD, Hong Kong has undergone a painful adjustment of its assets price and economic structure. Asset price including property valuation dropped by over 50% from the peak in July 1997 to the trough in September 1998. The all-way-high unemployment and bankruptcy rates have weakened domestic demand and confidence on domestic companies. Credit crunch and downgrading in the market make borrowing unreasonably difficult and costly. In addition, Government's intervention in the stock market in August 1998 has aroused unprecedented controversy and vigorous debate. All these have made the market players extremely cautious in arranging new deals or planning re-entry to the market.

While the AFC has fully demonstrated the onslaught of unrestrained and volatile international capital in Asia, the crisis at the same time unveils the inherent weakness of Asian economies. Despite the high GDP growth rates, strong domestic savings and prudent fiscal policy, the Asian countries could not avoid stumbling into a world-class liquidity crisis. In fact, currency crisis is not unique to Asia. Europe suffered from the Exchange Rate Mechanism crisis in the late 1980s.[7] The difference between the two is that Asia lacks a long-term and effective mechanism to channel funds within the region. Domestic savings in Asia are invested overseas in long-term investments that flow back into Asia mostly in the form of short-term bank loans. What even worse is the employment of these funding to invest excessively in illiquid long-term projects and to over-accumulate on unproductive inputs.

In short, the crisis is a mismatch in funding and a failure of effective intermediation. The over-borrowing in short-term foreign currency debt and the under-development of domestic long-term capital markets are roots of the crisis. Could we transform the wealth of Asia into powerful liquidity in domestic markets, we could get away from this liquidity virus. The theme of the paper is on this exact prescription to nurture a deep, liquid and mature regional debt market.

The paper will start with a brief history and development of the Hong Kong debt market. Special references will be made to the market infrastructure and debt trading system. Next, government's efforts in promoting the local debt market will

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[7] Anonymous. "The Asian Debt Market." Asiaweek. 19 December 1997, p.68.

be studied. The establishment of the Hong Kong Mortgage Corporation (HKMC) and the implementation of the Mandatory Provident Fund (MPF) scheme will be highlighted. It will be followed by a wider perspective on regional forces in particularly the influence of the AFC on the development of Hong Kong into a regional debt centre. In the conclusion part, opportunities in the area of H-bond market, securitisation and others will be presented.

CHAPTER II

METHODOLOGY

The research is mainly conducted through three channels. First, an extensive literature review on the topic is done by going through academic journals of finance and periodicals of investment banking.

Second, various publications of investment banks and regulatory agencies in Hong Kong are studied. In particular, the writer gets quite a lot of information and up-to-date data from the home page of various multilateral and regulatory agencies such as the Asian Development Bank, the International Monetary Fund, the World Bank, the Hong Kong Monetary Authority, the Hong Kong Mortgage Corporation, the Stock Exchange of Hong Kong and the Securities and Futures Commission. An electronic search using the PROQUEST database is also made to access hundreds of related articles.

Third, the writer also consulted a few professionals and market practitioners. They include investment bankers, government regulators and fund managers.

On researching the literature, the writer encountered a few excellent publications on the history and early development of local debt market. While these publications provide a useful base to start the research, the writer does not wish to replicate this history and description of the local market. Instead, the Asian Financial Crisis and its influence on the prospective development of Hong Kong debt market form the focus of this paper.

CHAPTER III

HISTORY AND DEVELOPMENT OF DEBT MARKET

Early History of Debt Instruments

The development of debt instruments in Hong Kong can be traced back to 1842, when the Treaty of Nanking established Hong Kong as a British trading port and naval base. At that time there was active discounting of commercial bills in support of trade by local merchants. In 1866, trading of equities and debentures first appeared and following the establishment of the Hong Kong Stock Exchange in 1891, such trading has become more active.[8]

While trading of these primitive instruments emerged as early as the nineteenth century, it was not until the early 1970s that a number of banks began issuing HKD certificates of deposit (CDs). Slater Walker Hutchinson, American Express Bank, Hong Kong Shanghai Bank and Wardleys were the early issuers of

[8] Bank, Erics. "The Emerging Fixed-Income Markets in Asia." Basingstoke: Macmillian Publishers Ltd. 1994 P.56.

HKD CDs. This was followed by the introduction HKD commercial paper to the market.[9]

Bond issuance in Hong Kong was not active in the 1970s. Due to the aversion of traditional Chinese towards borrowings, an absence of tax incentives and one-sided preference of investors towards equities, the markets of bonds and other fixed-income securities were not well developed.

Development in the 80s

It was not until 1975 that the first issuance of government bond started the development of Hong Kong debt market. The HKD250 million 5-year issue was a prelude of today's HKD97.5 billion worth of Exchange Fund Bills and Notes. Another important development was the series of bond and note issues introduced by the Mass Transit Railway Corporation (MTRC) since 1976. The quasi-government statutory corporation is by far the largest and most regular issuer in the local debt market.[10]

In 1988, the Australian government airline, Quantas was finally authorised by the Hong Kong Government to issue bonds denominated in Hong Kong Dollar. This marked the full internationalisation of the colony's local currency - Hong Kong Dollar. In the next year, a HKD500 million 6-year bond was issued by the

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[9] Ibid.

[10] Emery, Robert F. The Bond Markets of Developing East Asia. Colorado: Westview Press, 1997, p.5-6.

International Bank for Reconstruction and Development. Issues by the World Bank and other multilateral agencies followed.[11]

Recent Development

The nineties constituted the golden age of the local debt market. Following the Financial Secretary's budget speech in 1989 which unveiled government plans to develop the local debt market, the Exchange Fund Bills Programme was formally introduced in March 1990. Under the programme, bills of 28, 91, 182 and 364 days maturity were put up for tender regularly. The bills are issued by the Hong Kong government for the Exchange Fund, and represent the senior, unsecured obligations of the government. In May and October 1993, 2 and 3 years Exchange Fund Notes were introduced respectively. By the end of 1993, the total outstanding of Exchange Fund Bills and Notes had increased to a notional value of HKD28.1 billion. This was followed by the issuance of 5, 7 and 10 years Exchange Fund Notes in September 1994, November 1995 and October 1996 respectively. With its tax-exempt and virtually risk-free status, this programme has been very successful in creating an active secondary market in bills and notes with various maturity. In January 1999, the total amount of Exchange Fund Bills and Notes (EFBN) outstanding was $97.5 billion. Trading in these instruments is so active that a daily average turnover of HKD13.4 billion or 13.7% of total outstanding is achieved.[12]

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[11] Emery, Robert F. The Bond Markets of Developing East Asia. Colorado: Westview Press, 1997, p.5-6.

[12] Source: HKMA statistics found at website http://www.info.gov.hk/hkma/stat

With the successful launching of the Exchange Fund Bills and Notes Programme in the 1990s, a stable supply of high quality HKD debt paper and a reliable benchmark yield curve for HKD debt was created. The latter provided the spark for private debt issues in the territory. As the bills and notes are brought to market through a weekly auction process under a strictly competitive and absolutely non-intervened market environment, the 10-years-long benchmark yield curve is reliable to facilitate the pricing of private issues in the primary and secondary markets.

Besides the governmental issues of EFBN, local statutory corporations such as the Mass Transit Railway Corporation (MTRC), the Kowloon Canton Railway Corporation (KCRC) and the Airport Authority (AA) have also played active roles in debt issuance. Among which the MTRC is the most frequent and regular issuer. Since the mid-1980s, MTRC has been an active bond issuer in both local and overseas markets.

Primary issues

Government instruments

Government Bonds

In the past, the Hong Kong government has been an issuer of medium-term government bonds. In 1975, the government issued a HDK250 million 5-year bond. It was repaid in full in 1980. In 1984, the government issued a second bond for

HKD1 billion. It was also redeemed in full at maturity in 1989. Later on the government had issued 3 bonds totally for HKD3 billion in 1991, 1992 and 1993. Again these 3 bonds were all retired without re-issuance. After the 1993 issue, the government ceased issuance through the bond programme but instead began issuance through the Exchange Fund note programme.[13]

Exchange Fund Bills and Notes

Exchange Fund Bills are money market instruments with maturity less than 1 year and was first created in March 1990 under the Exchange Fund Bills Programme. Under this programme, bills with maturity of 28, 91, 182 and 364 days are put up for tender. Later on Exchange Fund Notes were brought to the market in 1993. There are now 2, 3, 5, 7 and 10 years issues. The papers are auctioned in the market where 223 recognised official dealers[14] tender bids for bills. Allocations are made in ascending order of yield. Subsequent trading in the secondary market is arranged by 33 authorised market makers[15] who provide both bid and ask prices during normal money market hours.

Private instruments

Interbank deposits

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[13] Banks, Erik. The Emerging Fixed-Income Markets in Asia. Basingstoke: Macmillian Publishers Ltd., 1994, p.58-60.
[14] As at 11 March 1998.
[15] As at October 1997.

They are short-term unsecured liabilities of the 3-tier banking system. The interbank market has existed since the late 1950s. As foreign banks in Hong Kong do not have an extensive retail network to absorb funding, they rely heavily on the interbank market and usage has been heavy. Maturity range from overnight to twelve months.[16]

Negotiable certificates of deposit (NCD)

NCDs are the senior and unsecured obligations of bank issuers. They are receipts for time deposits of fixed maturity, normally ranging from one month to five years. They are bearer in form and usually pay a fixed rate of interest. The first NCD can be traced back to 1973 when Slater Walker Hutchinson issued a floating rate HKD NCD.

Commercial paper (CP)

CPs are short-term instruments issued by large corporations with good credit standing. They are unsecured in nature with maturity ranging from one week to one year. Due to the relatively high minimum denomination (HKD500,000), most of the issuance are taken up by institutional investors. Major issuers in CP include the MTRC, KCRC, HK Electric, China Light and Power, Swire Pacific, Hong Kong Telecom, Jardine Matheson, Cheung Kong, Hutchison Whampoa, etc.

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[16] Banks, Erik. The Emerging Fixed-Income Markets in Asia. Basingstoke: Macmillian Publishers Ltd., 1994.

Bonds

Bonds can be fixed or floating rate, senior or subordinated, secured or unsecured, instruments. Maturity range from one year up. They are issued as registered instruments and are underwritten by a syndicate of merchant banks and securities firms. There are mainly three types of issuers. The first type is private corporations such as the blue chips. The second type is statutory corporation such as the MTRC, the KCRC and the AA. The third type is foreign corporation with international standing. This last type includes a number of top-rated supranational organisations such as the World Bank, the Asian Development Bank and the International Finance Corporation.

Mortgage-backed securities

These are instruments secured by mortgages from issuers' portfolio and are relatively new in the local market. The first deal was closed in 1994 when Solomon Brothers arranged a HKD500 million fixed rate bond for Bank of America Asia, securitised by mortgages from the bank's portfolio. As the property market in Hong Kong has enjoyed prosperous growth since the 80s, mortgage financing accounted for almost 40% of total loans granted in the territory. As the demand for residential mortgage financing is robust with sustainable growth, the government is concerned with the concentration and liquidity risks. A series of policies have been adopted to alleviate the situation. This will be discussed in details under the section of 'Establishment of Hong Kong Mortgage Corporation' in Chapter IV.

Market Infrastructure and Trading Systems

Credit Ratings

Though Hong Kong has no domestic rating agency, Moody's, Standard & Poor's, Thomson Bankwatch and Fitch IBCA all have offices in the territory. Moody's Investor Services established a regional office in Hong Kong in June 1994 while Standard and Poor's also set up an office at the end of 1994. Their ratings are recognised by the HKMA in the assessment of various debt securities to qualify for liquefiable assets and tax concession. Traditionally very few Hong Kong-based private companies are willing to disclose sensitive financial information for a credit rating. However, facing the strong funding needs to participate into giant infrastructure projects and the increasing demands from investors, there has gradually been a change in market attitude towards the credibility for a credit rating. However, there is no legal requirement for a credit rating for bond issuance in Hong Kong.

Market Structure

Trading of debt instruments in Hong Kong mainly operates in three markets: the market of Exchange Fund Bills and Notes, the SEHK and the Over-the-counter market.[17]

Market of Exchange Fund Bills and Notes

The primary issuance of EFBN is done through a weekly auction process where 223 recognised dealers tender bids. Allocations are made in ascending order of yield. Investors must submit their orders through these recognised dealers. A typical lot size is HKD10 million. To enhance the liquidity in secondary market, a market making system was designed under which a group of 33 dealers is selected to quote both bid and ask prices. This promotes liquidity and makes the secondary trading of EFBN most active among all debt instruments in the Asia region.

The HKMA and the SEHK have plans to list EFN on the Exchange by end of 1999. This prospective development will be explored in detail in Chapter VI.

Stock Exchange of Hong Kong

While the SEHK figured amongst the top ten stock exchanges in the world in terms of market capitalisation before the Asian Financial Crisis, the listing of debt securities on the Exchange was not active. Table 2 shows the number of listed securities by type from 1994 to 1998.

[17] Emery, Robert F. The Bond Markets of Developing East Asia. Colorado: Westview Press, 1997, p.28-32.

TABLE 2 NUMBER OF LISTED SECURITIES BY TYPE

As at 30 June	1994	1995	1996	1997	1998
Number of listed securities	**965**	**1,002**	**1,087**	**1,459**	**1,273**
Ordinary shares	517	537	562	627	675
Preferred shares	3	3	3	5	5
Warrants	296	261	259	488	297
Unit trusts/mutual funds	48	52	47	43	30
Debt securities	***101***	***149***	***216***	***296***	***266***

Source: SEHK "Administrative Report 1998: About the Exchange" found at website http://www.sehk.com.hk/ccd/annual

Even though the number of listed issues has increased sharply over the years, secondary trading of debt instruments on the Exchange is rare. Daily trading turnover of listed debt securities for the year ended 30 June 1998 was only around HKD0.65 million, as opposed to the HKD12.9 billion for equity stock. In view of the inactive secondary market, the HKMA is planning to extend the existing trading platform of automatic order matching system (AMS) to debt instruments. A pilot test on listing and trading of EFN will be launched in the third quarter of 1999. This will be further discussed under section of "Listing of EFN and other quasi-government issues" in Chapter VI.

Over-the-counter (OTC) Market

Attributed to the advantages of no levy as well as the possible evasion of tax records, trading of bonds mainly takes place on the OTC market. However, unlike the former two markets where there are proper records of trading, there is no reliable data measuring the activity of OTC market. The liquidity of bonds in the OTC market is largely a function of supply from the syndication group. Traders are able to consult their Reuter and Telefax screens to get bid quotations. However, because of the legal restriction to sell bonds short and the difficulties to obtain the physical instrument for delivery, dealers are reluctant to provide ask prices. Consequently, the OTC market in bonds is rather thin.[18]

Clearing and Settlement

Clearing and settlement of debt instruments in Hong Kong are arranged through three systems, HKMA's computerised book-entry system for both EFBN and private eligible debts, the clearing and settlement arrangements for local HKD bond transactions in the OTC market and the highly computerised system of the SEHK.[19]

HKMA's computerised book entry system

A book-entry clearing and settlement system was set up in March 1990 to match with the first issuance of Exchange Fund Bills. Central Moneymarkets Unit (CMU) service is operated by the HKMA and offers an efficient, safe and convenient clearing and custodian system for HKD debt instruments. Operated as a scripless book entry system, CMU handles debt instruments which are immobilised or dematerialised. Transfer of title is effected in computer book entry form. CMU

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[18] Emery, Robert F. The Bond Markets of Developing East Asia. Colorado: Westview Press 1997, p.31.

[19] Ibid, p.32-36

is capable of handling registration, clearing and movement of securities. Payment is made by directly debiting the clearing account of recognised dealer or the dealer's correspondent bank. Since December 1993, the HKMA has extended CMU service to other high quality HKD debt securities. Furthermore, in December 1994, CMU was linked to Euroclear and Cedel which are the largest international clearing systems in the world. This linkup has widened the investor base and took HKD debt securities to a platform accessible to overseas investors. In January 1996, CMU service was further extended to debt denominated in foreign currency.

With the successful launching of RTGS system in December 1996, the HKMA has achieved real time Delivery versus Payment (DvP) capabilities for all debt securities transactions cleared and settled with CMU. This greatly enhances the efficiency and minimises the risks associated with the settlement of payments.

In December 1997, CMU has linked up with the Central Securities Depositories (CSD) in Australia. The HKMA has also joined the Reserve Bank Information and Transfer System (RITS) and the Austraclear which are the settlement systems for the Australian government and private sector securities respectively. With this linkage, the HKMA is now able to offer to all CMU members an access to hold and trade securities in RITS and Austraclear. In addition, in April 1998, the HKMA and the Reserve Bank New Zealand have set up a bilateral securities linkage on reciprocal basis between CMU and Austraclear New Zealand. This enables investors in Hong Kong and New Zealand to hold and settle debt securities cleared in each of these two systems.

As at 31 December 1997, there were 554 private debt issues with a total nominal value of HKD199 billion lodged with CMU, an increase of 48% compared with the value in 1996.[20]

Clearing and settlement in the OTC

Besides CMU service, there is no centralised system for the clearing and settlement of transactions in private sector bonds. The clearing and settlement is carried out through a physical exchange of certificates, checks and signed transfers.

CCASS on the SEHK

Hong Kong Securities Clearing Company Limited (HKSC) is the official clearing house for stocks on the SEHK. It owns and operates the central clearing and settlement system (CCASS) as well as related depository, custodial, nominee and share registration services for eligible securities listed on the SEHK. Instead of cleared and settled through the CCASS, listed debt instruments are handled by banks or securities companies through their banks. However, to further enhance the liquidity in secondary market, the HKMA is planning to list its EFN on the Exchange and make use of CCASS in clearance and settlement. In January 1999, the SEHK issued a consultation paper on the proposed market infrastructure. In

[20] Source: HKMA statistics found at website http://www.info.gov.hk/hkma/stat

future, the same arrangement may be adopted to other debt instruments. The prospective development in this aspect will be discussed in Chapter VI.

CHAPTER IV

RECENT INNOVATIONS AND HKMA'S EFFORTS

Established in 1993, the Hong Kong Monetary Authority (HKMA) is widely recognised as the quasi-central bank of Hong Kong. A central bank's major functions such as the issuance of currency and the determination of interest rate are still decentralised to the three note-issuing banks and the Hong Kong Association of Banks respectively. However, the HKMA has taken up the more active role of a central bank in banking supervision as well as the formation and implementation of monetary policy. Its engagements in market operations and reserves management have become more active. This is well illustrated in the setting up of discount window and the recent measures taken in the active defence of local currency. By the same token, the HKMA is also keen on developing the local debt market of Hong Kong to mobilise resources for long-term economic development.

In fact, as early as 1990 the Government has started planning the development of a local debt market. The successful launching of Exchange Fund Bills and Notes programme provides a stable supply of high quality paper that paves the way to build up a domestic market and a benchmark yield curve. Infrastructure such as CMU and RTGS are promoted by the HKMA to substantiate trading and settlement. The linkages with the clearing systems in Europe, Australia and New Zealand have broadened the investor base of local debt instruments and set the foundation for further linkup within the Asia region. Four international credit ratings agencies have also set up their offices in the territory to publish ratings to prospective issuers.

Establishment of the Hong Kong Mortgage Corporation

Background

In March 1997, the HKMC was incorporated to take up a new strategic role in financial intermediation -- to channel long-term funding sources for the long-term borrowing needs in home financing. It is set to bridge the gap between future residential mortgage demand and supply as well as to ease the asset/liability mismatches of banks which fund long term mortgages with short-term deposits. In the long run, the HKMC will be an integral part of the local debt market.

Since the 1970s, Hong Kong has enjoyed prosperous economic boom and the property market has grown vigorously with rising household incomes. The last two decades saw an impressive increase in home ownership ratio, from 27% in 1980 to around 45% in 1996.[21] Coupled with the surging property prices, the outstanding

[21] Anonymous. "A Hong Kong Mortgage Entity Could Reduce Risk." Asian Wall Street Journal (New York) 13 November 1996.

amount of mortgage loans increased by almost 30 times, from HKD11.7 billion in 1980 to HKD348 billion in 1995.[22] The demand for home finance, or more precisely long-term home finance is tremendous.

However, the surging demand is not well matched by the local funding sources, which mainly take the form of interbank borrowings and customers' deposits. With high inflation rates and booming equity markets, over 80% of these two funding sources have a maturity of less than or equal to one month.[23] This engineers a significant mismatch with the significantly longer-term mortgage loans granted to home buyers.

Mortgage Portfolio

Property lending now accounts for over 40%[24] of total loans for use in Hong Kong. However, as the banks' exposure to property lending increases, the problem of maturity mismatch between funding and lending sides worsens. In order to mitigate the concentration and liquidity risks associated with rising loan exposure, the HKMC is set up to play the role of a credit-worthy intermediator to tap long-term savings. Capitalised at HKD2 billion[25] and backed by the government, the

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[22] Yam, Joseph. "Speech to the Hong Kong Economic Association" 12 November 1996.
[23] Ibid.
[24] Anonymous. "Guideline lifting likely to be ignored - as before.' South China Morning Post 30 July 1998. The latest figures show that in March property loans of all forms, including loans to developers and mortgage loans, stood at 48.9 per cent of HK dollar lending by authorised institutions.

[25] The initial capitalisation of the HKMC is HKD1 billion. In Sept 1998, its authorised and paid-up capital were raised to HKD3 billion and HKD2 billion respectively. With a minimum capital to asset ratio of 5%, the HKMC can purchase up to HKD40 billion worth of mortgage.

HKMC is capable of issuing long-tem fixed rate debt in the market. The funding can be used to acquire either fixed or floating rate[26] mortgage loans from bank lenders, thereby easing the liquidity mismatch and promoting the development of fixed rate mortgage markets in the territory.

A pilot scheme on fixed rate mortgage was launched in March 1998 to test the market response to the new mortgage product. Result has been very encouraging. The HK$500 million quota allocated for the pilot scheme is almost fully committed only half way through the six-month trial period. Up to June 1998, the two participating banks have approved 320 loans involving HK$484 million. In view of the favourable response, the HKMC has raised the pre-commitment amount and more banks are invited to launch the fixed rate mortgage products. As at 10 September 1998, 980 loans involving HKD1.35 billion was approved.[27] Of these, 523 loans involving HKD734 million have been drawn down.[28] In addition, the pre-committed amount for the purchase of fixed rate mortgages was further raised to HKD3.5 billion. In view of the favourable market response, fixed rate mortgage has become a regular programme of the HKMC.

Mortgage-backed securities

Set to be one of the most active issuers of debt securities in the territory, the HKMC will initially issue unsecured debt paper to fund the purchase of home mortgages. This will be followed by the introduction of mortgage-backed securities

[26] An interest swap will be required to hedge against the risk associated with a floating rate mortgage.
[27] HKMC "Announcement of half-year results." Sept 14, 1998.
[28] Ibid.

(MBS). The first batch of MBS is scheduled to be launched in the fourth quarter of 1999.[29] Unlike some previous MBS packaged by private issuers, the HKMC will engineer a standard structure and loan pool for its MBS. The standardisation will facilitate the pricing and trading in both primary and secondary markets.

Before launching of the MBS programme, the HKMC is actively acquiring residential mortgages from 23 approved local banks. Under a master mortgage sale and purchase agreement, the HKMC will buy only seasoned loans with a loan to value ratio at 70% or under, and a debt servicing load below 50% of borrowers' income. The first block of mortgage was purchased in November 1997. As at Dec 31, 1998, the HKMC had an outstanding mortgage portfolio of HKD11.4 billion. 90% of which were floating rate mortgage while the remaining 10% were fixed rate ones.[30] The efficiency of the purchasing procedures for floating rate mortgages will be further enhanced by the forward commitment facility. Under this facility, the HKMC will commit to purchase an agreed amount of mortgages from the approved sellers within a period of up to 12 months. This facility should provide banks with greater certainty on the amount of loans they can sell to the HKMC within the specified period and help them plan their new loan businesses more effectively.

Issuance programmes of HKMC

With a capitalisation of HKD2 billion and a revolving credit facility with Exchange Fund for HKD10 billion, the HKMC will raise most of its funding from

[29] Anonymous. "Launching of MBS in 1999." AppleDaily, Business News. 26 April 1999.
[30] Source: HKMA statistics found at website http://www.info.gov.hk/hkma/hkmc

the local debt market. In January 1998, a Note Issuance Programme (NIP) for HKD20 billion was first introduced. The Note is cleared through the CMU of the HKMA which also acts as the arranger, custodian, agent and operator. While this programme takes financial institutions as its main client base, a second programme was signed in June 1998 to target at institutional investors. Under this HKD20 billion Debt Issuance Programme (DIP), five primary dealers who have good access to institutional investors are appointed to play the role of underwriter and market maker for securities issued. In addition, twelve selling group members are appointed to help with the distribution of the debt securities.

In 1998, the two programmes together raised HKD5.2 billion of funding for the HKMC and provide a comprehensive coverage of the investor base of the Hong Kong dollar debt market. While the HKMC is already providing a consistent supply of high quality unsecured debt securities to the market, its programme on MBS will also be launched in the last quarter of 1999. In the USA, MBS and unsecured paper issued by mortgage corporations constitutes around 24% of all outstanding debt securities in 1994.[31] In the long run, this stable supply of high quality debt papers should enhance market liquidity and promote the development of local debt market.

The role of Mandatory Provident Fund

Mandatory Provident Fund Schemes (General) Regulation, which supplements the Mandatory Provident Fund Schemes Ordinance, was gazetted in

[31] Yam, Joseph. "Speech to the Hong Kong Economic Association." 12 November 1996.

April 1998. The MPF system will introduce community-wide retirement provisions in Hong Kong. Despite the troubled economic times, the MPF scheme will be fully implemented on 1 December 2000. It will largely be run by the private sector subject to the supervision of the MPF Schemes Authority. All MPF schemes will be defined contribution schemes. All employees and self-employed persons are required to contribute a sum equal to 5% of their monthly income while their employers have to match the amounts. All contributions must be fully and immediately vested and the accrued benefits of employees can be transferred to another scheme in case of job changes. All benefits derived from the contributions must be preserved until the employees attain the age of 65, or 60 if employment ceased.[32]

As the domestic population begins to age and the size of retirement savings continues to grow, the implementation of the MPF scheme serves as a reservoir for the growing retirement savings. In Hong Kong, there are a large number of small savers who have little choice but the low risk low return bank deposits and the high risk high return equity investment. Traditionally they have little exposure to debt securities. Following the launch of MPF scheme, this reservoir of funds can be pooled together to invest in a more diversified portfolio with a better return but a moderate risk. This trend towards the institutionalisation of savings will gradually prevail.

On the other hand, the implementation of MPF will facilitate the development of Hong Kong debt market by generating a robust demand for fixed

[32] Further information and details of the MPF scheme can be obtained from the Website of HKSAR government: http://www.info.gov.hk

income securities. The asset size of MPF is estimated to hit USD1.5 billion in its first year of operation, and is expected to grow to USD9 billion by the end of 2005 and then further to USD22 billion by the end of 2010.[33] Though the funds are given discretion on the portfolio-mix as well as the currency-mix, they are subject to the spirit of providing steady benefits at retirement. Therefore, hedging is required to bring any foreign currency exposure to within 70% of assets.[34] Besides, it is expected that a considerable portion of the funds will be invested in high-quality fixed income instruments which provide both a prudent investment choice and a better return than depositing. The demand for HKD-denominated debt instruments of larger issue sizes, better quality and longer-term maturity will substantially increase. The boosting on demand side will further pull for more quality issues, thus helping build up the critical mass to kick-start the development of a mature, deep and liquid local debt market.

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[33] Yam, Joseph. "Speech in Asian Debt Conference." July 1998.
[34] Yiu, Enoch & Hughes, Duncan. "International Monetary Fund conference puts Hong Kong financial services sector into global focus." South China Morning Post 8 March 1997.

CHAPTER V

REGIONAL FORCES AND THREATS

Syndication loan and credit crunch in the region

To finance the fast growing economies in Asia, governments and corporations have tapped various kinds of funding sources in the loan and capital markets. While we see some sovereign issuers start to access the capital market, syndication financing remains to be the dominant channel of capital raising in Asia. Syndicated loan is a co-ordinated funding arrangement between banks and borrower. Through the appointment of an arranger bank, basic terms and conditions of the prospective loan will be set out to participants of the syndicate. Participating banks, instead of lending individually to the borrower, pool their resources together and lend as a group. They all bear the same terms and conditions of the loan while the arranger takes charge of loan documentation, agency work, publicity and signing. Attributed to its simplicity in origination, flexibility of borrowing terms, looser lending criteria out of risk pooling among the syndicate, syndication loan is the preferred financing tool and accounted for 73% of all capital raised in Asia in

1996.[35] According to AsiaMoney, total signed loans for Asian borrowers had risen steadily from USD33.1 billion in the first half of 1995 to USD42.5 billion and USD52.1 billion in the same period of 1996 and 1997 respectively.[36] Alone in Hong Kong, the leading syndication centre in Asia, the volume of loans arranged for local borrowers rose to a peak of USD42 billion in 1997.[37]

However, as Asia steps into the worst era since the oil crisis, business environment has changed at an unyielding pace. What we have seen throughout the region is a fast evaporation of wealth, sharp decline in asset prices, threat to financial stability, and most of all, a manifestation of sudden capital flight and investment retreat. The syndication loan market in Hong Kong has been particularly devastated. As banks suffered huge bad debts and curtailed their participation, as well as the withdrawals of the in-trouble Japanese banks, volume of syndicated loans arranged for Hong Kong borrowers dropped drastically by 82% from the peak of USD42 billion in1997 to just USD7 billion in 1998.[38] It should be emphasised that the withdrawal of Japanese banks was critical as they have accounted for as much as one-third[39] of the liquidity in the past.

Besides bringing a contraction in demand from borrowers as well as withering domestic consumption, the Asian Financial Crisis (AFC) does induce a worldwide tendency to deleverage and alleviate the over-exuberance of Asian borrowers in prior years. Syndication financing, usually originated in bulk sum

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[35] Societe Generale Asia. "Syndicated loans." AsiaMoney September 1997, p2-5.
[36] Parsons, Nick. "Credit still flows in Hong Kong." AsiaMoney September 1997.
[37] Anonymous. "Syndication loan volume shrinks 82% as exuberance disappears." South China Morning Post 28 January 1999.
[38] Ibid.
[39] Source: Bank for International Settlements, Quarterly report

shared by a pool or syndicate, generally offers more flexibility and much cheaper pricing than fixed-rate issues. Naturally it has become the preferred source of fund raising. However, this funding source is short-run in nature and needs a dynamic market for refinancing to meet the usually long payback period of infrastructure projects where the funds are invested.

As a result of this market-generated capital flight and credit crunch, smaller companies in Hong Kong could not just get into the syndication market for funding. Even the blue chips and the most well-known companies are required to bear an Asian premium for loans during this crunch period. Nevertheless, the shrinking of the local syndication market and the painful experience of many corporations provides warnings to entrepreneurs and finance practitioners in the city. Now, while borrowers are tapping funds through other channels in the market, local fixed income investors are filling the gap left by syndicated groups of banks. The HKD1.5 billion three-year fixed-rate offering by Hutchison in January 1999 is a good example of this. According to Solomon Smith Barney, more than HKD13 billion was tapped in the debt market by leading developers in January 1999, which is almost the same amount raised in the previous seven months.

As illustrated, the Asian economies are facing collapse in market confidence, flee of international capital and credit crunch in financial markets. To solve these market-created problems, we should employ market-based solutions, which the HKMA is pursuing as will be discussed in a later section.

The inadequacy of IMF rescue package

The Asian Financial Crisis has started by drying up the liquidity of a few small Asian economies, Thailand, Malaysia, the Philippines and Indonesia. The contagion spread capital flight from South Korea, China, Hong Kong, over Siberia to Russia and across the Pacific to Latin America. The accumulated capital inflows into these economies over recent years has suddenly turned into a sharp capital outflow. Accompanied by a massive contraction in international credit, Asian economies find their foreign exchange reserves depleting as rapidly as the fall in their currencies. In fact, some Asian countries with moderate foreign reserves do actually owe more short-term debt. Table 5.1 shows the short-term debt and foreign reserves of a few distressed Asian countries just prior to the outbreak of the AFC in July 1997.

TABLE 3 SHORT-TERM DEBT AND RESERVE OF DISTRESSED ASIAN COUNTRIES AS AT 30 JUNE 1997[40]

Countries	Short-term debt	Reserves	% of debt to reserve
Philippines	8	10	80
Indonesia	35	20	175
Malaysia	16	27	59
Thailand	46	31	148
South Korea	70	34	206
Taiwan	22	90	24

(All figures in USD billion)

Source: Bank for International Settlement, IMF

[40] Delhaise, Philippe F. "The cure for the Asian Flu." Financial Planning 1 December 1998.

If a country with more short-term debt than reserves is declined to renew the debt, she would go into default as the reserves would never meet the immediate obligations. This phenomenon was exactly what was happening in Thailand, Indonesia and South Korea. As the crisis emerged, nearly all short-term creditors and international funds pulled out from the market and demanded their funds at the same time. The International Monetary Fund (IMF), whose purposes are maintaining international economic stability and helping countries overcome an immediate lack of foreign reserve, is the ideal authority to remedy the situation.

The three mostly hit countries in the crisis, Thailand, Indonesia and South Korea quickly reached agreements with IMF on the conditions of rescue packages. Among other conditions, the major principles under the packages include reductions in economic growth, curbing of inflation, recapitalisation of banks, shooting-up of short-term interest rate, austerity of budget programmes and the liberalisation of markets, which are analysed as follows:

Reduction in economy growth

As the Asian countries had enjoyed strong and consistent economic growths over the decade, many Asian governments and corporations presumed strong and persistent growth a norm in their economic development. As they were overwhelmed by the strong growth figures and the grand infrastructure projects, their economic policies and investment decisions were often short-sighted. Vivid growth and expansion were achieved at the expense of a prudent and regulated financial system. IMF's prescription is to ensure a full reform and a healthy development of financial and monetary system before the economies take off again.

Curbing of inflation

The positive side of currency devaluation is the increase in competitiveness and hence a growth in future exporting. Balance of payments will gradually improve to pay off debts and accumulate reserves. However, inflation will gradually eat off the gain in competitiveness. The IMF's prescription is to stabilise the currency so as to retain the benefits of devaluation.

While the two principles above are reasonable, the writer is sceptical to the following five:

Recapitalisation of banks

Aiming at a quick reform of the banking system, IMF requires the banks of distressed countries to raise their capital adequacy ratio to the international standard of 8%. However, even banks would find it difficult to raise fresh equities under extreme market conditions. Their only way to improve the capital adequacy ratio is to further reduce lending. The consequence is a severe credit crunch.

As their currencies had devalued drastically, the export-driven Asian countries would naturally benefit from the increase in competitiveness. However, as they also rely on imported raw materials and semi-finished products, the sharp contraction in bank credit would deprive a viable business even the chance brought by devaluation.

Shooting-up of short-term interest rate

The IMF's philosophy is that a high interest rate can retain the liquidity of foreign investors, thus avoiding a sweeping flight of capital. Therefore, short-term interest rate should be kept at a high level to provide the incentive. However, capital flight is more of a problem of confidence on the future balance of payment of a nation, rather than merely the attractiveness of return. The recent fall in Brazil Real and the skyrocketing interest rate in Brazil is a good illustration. The market focus at crisis time is the confidence.

In addition, as Asian companies traditionally rely more on short-term funding. Like the previous factor on capital adequacy ratio, surging short-term interest rate will deprive viable business from the chance of recovery, put heavy burden of compounding interest on delinquent borrowers and most of all, discourage even sound investment.

Austerity of budget programmes

Fiscal austerity is proposed by the IMF to control government spending and thereby reduce budget deficits. However, this will cause deflation and global demand to shrink. Deflationary cycles are dragging forces against a recovery, which cannot be underestimated. Tightening fiscal policy exacerbates the economic downturn and it will be even tougher for banks and heavily-indebted industries to turnaround. In addition, under extreme conditions, investment sentiment is irrational and market simply fails to function normally. It is doubtful whether the allocation of capital resources will be efficient. Government's planning and expenditure on a few strategic industries are important for the long-run productivity of the economy.

Liberalisation of market

This last principle on the openness of the financial market to foreign investors is controversial. There seems to be a view that only foreign banks are capable of investing huge sum to buy out these in-trouble institutions and introducing the standards of professional financial intermediation. Such reforms are essential to the recovery of banking system in the distressed economies. However, under such desperate market sentiment, it remains a question whether the property and equity markets in turmoil will fairly reflect asset values.

Despite queries on the credit worthiness of these conditions, they are all in process in exchange for the precious IMF's rescue packages - USD17 billion bailout of Thailand, USD43 billion bailout of Indonesia and USD57 billion bailout of South Korea.[41] While the sacrifice of these Asian countries in distress are difficult to estimate, the liberalisation of financial market and adoption of Western professionalism in market intermediation are irreversible. This equipment of more professional capital markets will streamline the access of borrowers to adequately tailored funding. This will be an important evolution towards the emergence of a regional debt centre.

Guarantee to distressed nations

Threatened by capital flight in a world-class liquidity crisis, the market needs a powerful lender of last resort, capable of reversing or at least alleviating the massive contraction of international credit. A good approach is to provide guarantee to these distressed countries so that market panic can be curbed and resources can be mobilised to remedy the sufferings after crisis.

In November 1998, the Japanese government has offered to work with multilateral agencies to provide guarantees for bonds issued by troubled Asian countries[42]. The plan, funded by a USD30 billion aid package from Japan, is originated from an innovative guarantee programme from the World Bank. In

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[41] Anonymous. "What did it get us?" Wall Street Journal 20 January, 1999.
[42] Raband, Belinda. "Japanese Guarantee Offer May Lift Asian Bond Issues" Asian Wall Street Journal (New York) 9 November 1998.

October 1998, the World Bank provided a guarantee to the USD300 million issue of the Electricity Generating Authority of Thailand. This raised the barely investment-grade triple-B-minus instrument to a more respectable single-A-minus and the issue was successful.

Also in November 1998, Japan Prime Minister Keizo Obuchi and USA President Bill Clinton announced in their joint statement that Japan, the USA, the World Bank and the Asian Development Bank will set up a special fund of USD5 billion to guarantee sovereign bonds to be issued by Asian countries[43].

Though the total sum of USD35 billion from the two guarantee programmes is small, the development does shed some lights on the revival of Asia. First, the provision of guarantees serves some multiplier effect to leverage the capital base of various multilateral agencies to make more credit available to the economies in distress. Second, with the guarantee from these multilateral agencies, the issues will enjoy a higher rating that lowers the funding costs. Third, the guarantee will also trigger re-participation of long-term institutional investors into the Asian markets as the perceived risks of these backed instruments are much lower. In all, the provisions of guarantees enables a more efficient allocation of rescue capital than simply direct lending. The chain effect will help revitalise the Asian bond market.

A market solution

[43] Anonymous. Afx News (London) 16 November 1998.

As discussed in previous sections, the Asian Financial Crisis was originated from the severe funding mismatch coupled with a market-generated capital flight and credit crunch. Without a sizeable bond market, Asian companies had to resort to short-term USD loans to finance toll roads, phone systems, power plants and many others that have long payback period and revenues in local currencies. That mismatch in both maturity and currency crippled the region when liquidity evaporated and currencies went into free fall in the AFC.

The first problem in funding mismatch can be solved internally by radical reform of the banking system and the financial market. Raising professionalism in bank lending as well as the development of a regional debt market are seen as the only rescues. The latter is particularly important in providing a long-term funding source to sustain economic growth.

However, the second problem in capital flight and credit crunch, resulting from collapse of confidence, is external in dimension. It cannot be resolved without setting the market back into motion.

While the rescue packages of the IMF could help countries overcome an immediate lack of foreign reserves, liquidity of the economies had already dried up. Collapse in confidence and credit crunch weakened market vigour. As the countries in distress desperately sought rescue package, the IMF jumped in by lending USD17 billion to Thailand in mid-1997. Then, it was the USD43 billion bailout of Indonesia. It was followed by the USD57 billion bailout for South Korea. In July

1998, it came the USD22.8 billion bailout for Russia and hopefully, the last USD41.5 billion bailout to Brazil in hope of extinguishing the Asian flames.

But how much can IMF afford before the stability of international financial markets be brought to order? Just paying off or filling the gap of fleeing capital is not sufficient. As the chaos is generated in the market, focus should be brought back to the origin to reverse the capital flight. The renewed participation of long-term institutional investors such as mutual and pension funds is essential to a sustainable recovery. Therefore, the key is to make use of the limited public funds and the market to kick-start private money and generate snowballing effect on market re-participation.

Various renowned international financial supranationals such as the IMF, the World Bank and the Asian Development Bank can contribute to bring this market solution into practice. Similar to the guarantee on distressed nations as outlined in previous section, these supranationals can issue high-quality debt paper in Asian markets. Provided a well structured set of covenants on borrowers, the funds raised can be used to alleviate the liquidity needs as well as to capitalise the financial sector of the distressed economies. As the supranationals themselves are triple A in credit rating and the instruments are well governed by covenants, the issues will be granted triple A rating as well and normal market interest rate can be secured. The issues will be appealing to both international and regional surplus economies and households. This supranational-issuance programme can exactly reverse the capital flight and thus break down the credit crunch at crisis time.

Emergence of regional rivalry

A SD300 million 3-year bond was issued in Singapore by the International Finance Corporation in October 1998. This was the first Singapore dollar-denominated bond issued by a supranational entity and it marked a step forward by Singapore in rivalling with Hong Kong as the leading debt market in the region.

Singapore, a long-time challenger to the role of Hong Kong as an international financial centre, took the very chance in September 1998 when the HKMA issued letters to request the supranational borrowers to desist from raising funds at short maturity. During that golden period when the HKMA was busy defending the peg and aroused unprecedented controversy in intervening the equity market, the Singapore government wooed these supranational and bilateral agencies to issue local-currency bonds. Undoubtedly this welcome mat to supranational agencies will benefit Singapore from an increase in high-quality bond issuance.

Despite the strategy, Hong Kong should remain as the regional debt market leader.

With well-funded government-linked companies controlling about 65 per cent of the economy, inactive government bond market and low interest rates, there is basically a lack of need to raise funds in Singapore. The government-linked companies and statutory bodies tend to have a lot of surplus funds. Meanwhile, government-issued debts are mostly held to maturity by banks to meet their liquidity reserve requirements. So a vibrant secondary market in these instruments is unlikely to develop.

The Singapore debt market is made up of 2-10 year government issues, a range of small-scale corporate issues and the Asian dollar bond market. At the end of 1997, Singapore had around US$14 billion of government bonds and bills outstanding. In the private sector, 48 issues of corporate bonds raised SD5.9 billion in 1997, while the Asian dollar bond market raised USD1.1 billion through 49 issues.[44] The size of its debt market is only a fraction of that in Hong Kong. Its small size is incompatible with the sums required to fund the financial reforms and infrastructure projects in the region.

Another major hindrance to Singapore is the existing restrictions imposed on foreign investors regarding the holding of Singapore Dollar. The Monetary Authority of Singapore (MAS) has a long-standing policy to discourage the internationalisation of the Singapore Dollar. Through the implementation of the Notice to Banks MAS 621, which spells out the specific do's and don'ts which banks have to follow, the use of the Singapore Dollar outside Singapore for activities unrelated to Singapore's real economy is restricted.[45] The policy has helped mitigate the currency from the volatility that the other Asian economies were suffering. However, it also poses a limit on the investment of overseas funds in Singapore dollar-denominated debt. Though a gradual internationalisation of the Singapore

[44] Source: information is found at website http://www.mas.sg

[45] Lee, Hsien Loong. "Improving the hardware of the financial sector" Speech given by the Chairman of MAS at the official launch of the MAS electronic payment system, 13 August 1998.

dollar is underway, the government still has a lot to do to catch up with the financial and capital freedom of investing in Hong Kong.

CHAPTER VI

PROSPECTIVE DEVELOPMENT

H-bond market

Due to the heavy foreign and domestic indebtedness prior to their takeover in 1949, the Communist government was very cautious in her approach to debt financing. As tax served as the major vehicle for government funding, the Communist government used bonds only sporadically. In the founding of the People's Republic in 1949, there was a small issue of government bond. Afterwards, during the first five year plan from 1953-1958, a substantial government bond programme was also undertaken to finance economic construction. Nevertheless, the Chinese government paid off all the indebtedness in 1968. It was not until in 1978 that the economic reform of Deng Xiaoping promoted the development of a formal bond market. The strong demand for capital in infrastructure projects catalysed the emergence of the first treasury bond in 1981.[46] However, they were sold to state employees and Chinese institutions under a

[46] Chen, Ji & Thomas, Stephen C. "China's untapped resources." China Business Review 25 (January/February 1998): 30-36.

compulsory purchase plan. Bond interest rates also differ according to the purchaser's identity. Due to such administrative constraints, the growth of bond market in PRC has been limited. In 1995, total PRC government debt outstanding was only about 23% of GDP, versus the 63% of USA, 59% of UK and 60% of Germany in 1996.[47]

Though the development of China's bond market is shallow, we can foresee more active issues of China's international bonds in the coming decade. As the country moves to restructure its state-owned enterprises (SOE) and pushes ahead with major infrastructure investment, the need for long-term funding is tremendous. In 1996 and 1997, the central government allocated USD2.5 billion and USD3.6 billion to cover enterprises' debts to state banks. The provision will certainly go to a peak in 1998 and 1999 following the Asian Financial Crisis. Recently, the Ministry of Finance announced that it would issue USD32.5 billion in bonds to recapitalise the four largest local state banks.[48] In addition, to alleviate the social unrest resulting from the layoffs associated with SOE reform, the central government has speeded up its housing reform and infrastructure projects.

Recently, China has increased investment in infrastructure facilities by USD12 billion. The increase will inflate the budget deficit in the fiscal year 1998 to over RMB 150 billion[49], which will be financed by bond issuance. Estimates by the World Bank reveal that the T-bond market could grow to USD154 billion by 2005,

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[47] Chen, Ji & Thomas, Stephen C. "China's untapped resources." China Business Review 25 (January/February 1998): 30-36.
[48] Anonymous. "Recapitalisation of state banks." Business China 16 March 1998.
[49] Anonymous. "Ministry issues circular on investment in infrastructure." BBC Monitoring Asia Pacific. 8 April 1999.

an enormous increase from the USD40 billion in 1995.[50] This massive supply of quality debt will provide the lifeblood for Hong Kong to develop as the leading bond centre in Asia.

The non-government bond sector of PRC is even smaller. Non-government debt instruments include corporate and corporate convertible bonds, state investment bonds, state investment company bonds and bank financial bonds. Total outstanding of these four types of bonds was USD22.3 billion in 1994.[51]

1999 is a golden year for Hong Kong to play this gigantic role for China. Following the listing of the seventh issue of Chinese bonds on the Exchange in December 1998, the SEHK signed an agreement with China's Ministry of Finance for listing of bonds issued by the People's Republic of China. In fact, constrained by administrative measures and an inadequate regulatory framework, China needs an offshore finance centre to launch its treasury bonds and activate the secondary market. The signing marks the full support of PRC to develop Hong Kong as a fully-fledged bond market for China.

Since 1993, China has already listed seven of its sovereign bonds on SEHK. Though trading is still done over the counter, the listing status enables institutions limited to listed products to invest in the paper, thus expanding the investor base. In addition, to enhance liquidity in secondary market, the SEHK is planning to develop a retail market for fixed income instruments on the Exchange. A consultation paper

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[50] Chen, Ji & Thomas, Stephen C. "China's untapped resources." China Business Review 25 (January/February 1998): 30-36.

[51] Chen, Ji & Thomas, Stephen C. "China's untapped resources." China Business Review 25 (January/February 1998): 30-36.

was already published to explore the desired market infrastructure for listing of EFN. If the pilot scheme on EFN is successful, it is expected that a similar infrastructure can be implemented on other fixed income instruments. This will attract more issues from China as well as other sovereign debts that are fundamental for a deep Asian bond market to take off.

Listing of EFN and other quasi-government issues

With an aim to activate the secondary trading and kick-start the local debt market, the SAR government has been planning for the listing and trading of debt instruments on the Exchange. In November 1998, the SEHK announced its plans to list the debt instruments of the HKMC, MTRC and AA on the Exchange. This was confirmed in the Financial Secretary's budget report in March 1999 in relation to the listing of EFN and possibly other debt instruments.

A first consultation paper on the prospective infrastructure for listing of EFN was published in January 1999. In order to make the EFN accessible to retail investors, the existing trading platform of automatic order matching and execution system will be used. Trades will be settled through CCASS on a T+2 basis. Initially, settlement will be on a trade-for-trade basis but it may be changed to Continuous Net Settlement in future. A linkage will also be established to allow free-of-payment transfers between participants of CMU and CCASS.[52] In addition,

[52] This linkage is aimed at facilitating delivery of EFN between the professional and the exchange EFN markets. Source: SEHK "Consultancy paper on the proposed market infrastructure for trading of EFN.' January 1999.

facilities will be introduced to allow retail investors to tender for EFN when they are initially offered for subscription.

The listing and trading of EFN on the Exchange will greatly enhance the liquidity in the secondary market and help boost the development of the local debt market. While the proposed market infrastructure will initially only be available to the HKD33 billion worth of EFN, they may be modified in future for other debt securities of public issuers such as MTRC, HKMC, AA, KCRC as well as some corporate issuers.

Trend of securitisation

Securitisation is the repackaging of receivables or assets in tradable form. Receivables are not confined to mortgage payments. They also include proceeds from business loans, credit card remittances, rent payments, student loans, etc. Its origin can be traced back to the USA around the 1970s when the Government National Mortgage Association first issued mortgage-back-securities. However, the banking crisis of the 1980s in the USA catalysed its development. After years of easy credit and loose monetary policy, funding and liquidity finally became more costly. Banks had no other way but to turn to asset securitisation as an additional source of funding to free up capital.

A similar situation is now evident in Asia. The over-exuberance of Asian borrowers and the maturity mismatch make securitisation an attractive channel for banks to escape from the Asian premium and free up more capital. On the borrowers' side, the drying up of liquidity and downgrading also force them to turn to their asset pools and demonstrate the quality of their best assets for funding. For the investors, asset-backed securities offer a more secure way of gaining exposure to the region. In all, the AFC has sharpened the attractiveness of securitisation to Asia.

Securitisation offers a diversification of funding sources and accessibility to capital markets. Usually, with a tailored segregation of assets for securitisation, the new issue alone will generate a higher credit rating than the issuer herself. In addition, ratings can be even higher with the various structures of credit enhancement such as over-collateralisation[53], cash reserve funds[54], monoline guarantees[55] and so on. Even the exchange risk can be alleviated using currency swaps. All these wrapping and structures make the once unattractive borrowers appealing to most international investors. For example, in June 1997, Dah Sing Bank securitised its Hong Kong residential mortgage portfolio via the issue through a special purpose vehicle of USD300 million. The issue was enhanced by a first loss provision from Asia Ltd for USD33 million as well as a full guarantee from CapMAC[56]. Coupled with a triple-A currency swap from General Re, the bond was

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[53] Over-collateralisation is the provision of more underlying assets so that the value of collateral exceeds the sum raised from the issuance. As protection to investors increases, credit risk associated with the issue is lower.

[54] A cash reserve fund is a pool of money set aside to satisfy obligations of the instrument in case of receivable shortfall. This also reduces the credit risk of the issue.

[55] In contrast to over-collateralisation and cash reserve fund which are forms of internal credit enhancements, monoline guarantee is an external credit enhancement in which the issue and the payments are guaranteed by one of five monoline financial guarantors MBIA, Ambac, CapMAC, FSA and ASIA Ltd. Except ASIA Ltd. which was rated A by S&P's, all the other four insurers are rated triple A.

[56] Asia Ltd. and CapMAC are monoline issuers which are rated A and tripe-A by S&P's and Moody's respectively.

rated triple-A by Moody's. On the other hand, the standalone rating of Dah Sing Bank is not as attractive. Though the bank does not have a Moody's rating, Standard & Poor's has assigned public information ratings of BBB-pi to the Bank.[57] This illustrate the significance of credit enhancement on the credit risk associated with a securitised issue.

With a developed legal framework, pools of high quality assets and a liquid swap market, Hong Kong is one of the most mature securitisation markets in Asia. Furthermore, the establishment of the HKMC and its securitisation programme will bring standardisation to the market, thereby reducing transaction costs and attracting greater number of issues.

In the long run, China can be the strongest asset backed markets in Asia. The country's vast and rapidly growing economy has a huge demand for capital. Securitisation offers the opportunity to structure a package of credit enhancements which is far more palatable to international investors than naked corporate or bank risk.[58] A number of state bodies including the People's Bank of China, China Securities Regulatory Commission and Bureau of State Owned Assets are engaged in a consultation process about how to develop its potential. In December 1988, the first securitisation deal in China, involving an issue of up to US$200 million, will be securitised by the outstanding receivables of a pool of more than 10,000 Chongqing enterprises[59]. After two years of preparation, the deal has finally won Beijing's initial approval and the State Administration of Foreign Exchange (SAFE) has

[57] Anonymous. "Asian capital markets news in brief." Euroweek 31 January 1997.
[58] This is illustrated in the example of Dah Sing Bank earlier in the section.
[59] South China Morning Post December 21, 1998.

already given verbal consent for international credit rating agencies to prepare ratings. The issue will be backed by the United States' financial guarantee insurance giant MBIA Assurance and the launch time is expected in the first half of 1999.

Nevertheless, due to its complicated structure, the development of securitisation is highly dependent on the presence of a developed legal framework as well as the market's perspective on this new funding mechanism. One expects each new deal in China to trigger waves of legislative acts and regulatory changes. Hong Kong is exactly at this premier position to structure deals and open her financial infrastructure to mainland's issuers. Securitisation techniques are already widely practised in Hong Kong, with lawyers, accountants, rating agencies, financial guarantors and investment bankers developing a relatively deep pool of experience. Though the legal framework remains the major hindrance to asset securitisation in China, this prospective issue will pave the way for the creation of a completely new market for mainland enterprises to revive their funding programmes.

CHAPTER VII

CONCLUSION

The economic developments of Asian countries have been enormous over the last decade. As credit expanded extensively, investment in infrastructure projects and growth of equity markets have experienced unparalleled growth. On a relative basis, the development of debt markets lagged far behind. Few raise the issue until the outbreak of the Asian Financial Crisis which swiftly evaporated the vigour of prosperous Asia.

While the detailed mechanism of the AFC is not repeated here, it should be stressed that the crisis did stem, at least partly, from the severe mismatch in funding and failure of effective intermediation in the region. Our failure to generate long-term liquidity to fuel regional economic growth inevitably reversed this growth. What we need is a solution that can revive market confidence. If we had developed a deep, liquid and mature regional debt market, we would not have suffered so much in the turmoil. Perhaps the crisis would never have happened at all.

The last two sentences summarise the feeling of a typical market participant. With hot money kept pouring in for investment opportunities, borrowers found it too easy to get bank credits. Most therefore felt that the development of a debt market was not necessary.

Now, the Asians are crying from the pains of sharp recession and contraction in wealth. They are all aware of the deficiency. In this aspect, the crisis does inject an unprecedented driving force to propel the development of a mature Asian debt centre.

Hong Kong, with an established legal framework, pools of professional practitioners, advanced market infrastructure and full financial liberalisation, should play a proactive role in commanding such a development. Her unique geographical position of both within the orbit of emerging market and at the vicinity to Mainland China offers the SAR unparalleled opportunity to develop as both a regional debt centre and a premier financing centre for China.

In fact, all the more developed Asian countries including China, Hong Kong, India, Indonesia, Malaysia, Philippines, Singapore, South Korea, Taiwan and Thailand have their own debt markets. However, owing to the relative small size of a single economy, none of them can have a substantial development. A new regional financial architecture is therefore needed. Though the launching of MPF scheme, establishment of the HKMC and the trend of securitisation will help boost the domestic debt market, a union of various fragmented debt centres in the region is a more practical way for a regional debt market to take off. Given the available bilateral linkage technology the HKMA is employing with Australia and New Zealand, linkages can be established with other regional centres to expand the investor base and market depth. Coupled with the modification of the CCASS system to apply on clearing of debt instruments, trading in secondary market and liquidity will greatly improve. An active secondary bond market can perform a maturity transformation function by channelling short-term funds into long-term marketable debt, and thereby attracting more issues. Regional union is perhaps the most direct way to develop a truly mature and deep debt centre.

Exploring the China market is also a critical strategy to develop the debt market of Hong Kong. Since 1993, a total of USD26.4 billion has been raised in the equities market of Hong Kong through initial public offerings and placements of 'H Share' and 'Red Chip'. In 1997 alone, 46% of new equity issued through the SEHK was by such companies. On the other hand, out of the total debt and equity financing raised by mainland companies in 1997, over 60% of which came from Hong Kong.[60] This witnesses the interdependency of the capital market of Hong Kong and the financing activities of mainland companies. This symbiotic relationship offers Hong Kong an unrivalled position to serve as the premier financing centre for China. This prospect in the area of H-bond is already explored in a previous section.

In all, Hong Kong is heading the right direction to develop as the region's leading debt centre. Fundamentals in form of legal framework, market infrastructure and professional expertise are deep-rooted. Coupled with the launching of MPF

[60] Tsui, Alec. "Benefits and pitfalls of financial liberalisation." Speech of Stock Exchange of Hong Kong 3 June 1998.

scheme and the HKMC, domestic demand and supply of debt instruments will be greatly boosted. In addition, with the advanced technology on bilateral linkage and the unrivalled geographical proximity to the China market, Hong Kong will further take the role as the premier financing centre for China. Finally, having learnt an expensive lesson from the AFC, there is no doubt that Hong Kong and the regional economies will have the determination to nurture a truly mature, deep and liquid debt financing centre for the long-term development of Asia.

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